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identifying that the packet received from the source is destined for a destination which must be accessed through the trunk group, by checking a trunk bit in a lookup table;

identifying an appropriate trunk port of the trunk group on which to send the packet to the destination;

forwarding the packet to the destination on the appropriate trunk port.

- 21. A method as recited in claim 20, wherein said step of identifying the trunk port for communication includes a step of performing a lookup of the destination address in the lookup table, and identifying the trunk port based upon the lookup.
- 22. A method as recited in claim 21, wherein said step of identifying the trunk port further comprises the steps of

determining a destination address match in the lookup table; identifying a rules tag in the lookup table;

identifying a trunk group identification in the lookup entry;

determining a trunk port index based upon the rules tag;

applying the trunk group identification and the trunk port index to a trunk group table, said table therefore identifying a trunk port for communication.

23. A method as recited in claim 22, wherein said rules tag identifies the trunk port index based upon predetermined bits of at least one of a source IP address and a destination IP address.

24. A method as recited in claim 20, wherein said step of identifying the trunk port for communication comprises a step of applying trunking information to a trunk group table.

- 25. A method as recited in claim 24, wherein said trunk group table is modified to reflect trunk port failures.
- 26. A system for sending packets between ports on trunked network switches, said system comprising:
 - a first switch having a plurality of communication ports;
 - a second switch having a plurality of communication ports;
 - a trunk connection between said first switch and said second switch;
- a sending unit for sending a packet from a first port of said first switch to a second port of said second switch;

an ingress unit in said first switch for receiving said packet from a source, and for performing an address resolution lookup on one of a source address and a destination address of the packet based upon a lookup table;

an identifying unit for identifying that the first switch and second switch are connected by the trunk connection by checking a trunk bit in the lookup table, and for identifying an appropriate trunk port of a trunk group on which to send the packet to a destination; and

a forwarding unit for forwarding the packet to the destination on the appropriate trunk port.

- 27. A system as recited in claim 26, wherein said identifying unit comprises a lookup unit for looking up the destination address in the lookup table.
- 28. A system as recited in claim 26, wherein said lookup table comprises address entries and corresponding rules tag information.
- 29. A system as recited in claim 28, wherein said lookup table further comprises trunk group identification information.
- 30. A system as recited in claim 29, wherein said identifying unit identifies the appropriate trunk port by determining a trunk port index based upon a rules tag in a matching lookup entry.
- 31. A system as recited in claim 30, wherein said identifying unit is configured to identify the trunk port index based upon predetermined bits of at least one of a source IP address and a destination IP address.
- 32. A system as recited in claim 26, wherein said identifying unit identifies the appropriate trunk port by applying trunking information to a trunk group table.